

Energy Savings Performance Contracting

Saving Facility Resources

Case Study



City of Edmonds - Phase 1



Project Description:

This project consisted of retrofit and replacement of various mechanical and control systems at the City of Edmonds Library, City Hall, and Public Safety buildings. All major components of the HVAC and control system at the Library were replaced. The City Hall HVAC systems received new fan coil units, improved controls, and revised ducting. The Public Safety Building's systems received new fresh air supply, and have been fully commissioned.

Project Completed Total: July, 2006
Project Cost: \$731,800
Project Number: GA Project #2005-217 G (2-1)

Annual Energy Project Savings:

Electrical	\$26,714	kWh	423,786
Natural Gas	\$0	Therms	0
Fuel	\$0		0
Water	\$0	Gallons	0
Maintenance	\$2,500		
Total Avoided Costs:			
Guaranteed	\$24,107	Verified	\$29,214

Funding Sources:

Loans:	\$203,011
Utility Incentives:	\$52,978
Other:	\$384,811

Project Managers:

Client Contact Information:

Noel Miller,
Manager,
City of Edmonds
(425) 744-0234

General Administration's Contact:

Donna Albert
P.E., Energy Engineer
Department of General Administration
(360) 902-7248

Energy Service Company's Contact:

Mike O'Conner,
President,
Quantum Engineering
(206) 523-5640

Highlights:

Quantum commends the maintenance staff for continuing to properly operate and maintain the control systems and HVAC systems in order to achieve energy savings.

Quantum Engineering
Monitoring and Verification Report

Emission Reductions:

Annual Reduction in CO2:

339,023 pounds per year

Annual CO2 Reduction Represents:

- ❖ **Removing 23 Cars from the road, or**
- ❖ **Planting 46 acres of trees, or**
- ❖ **Powering 31 Homes**

Monitoring & verification report details

- Quantum Engineering provided one year detailed analysis of each conservation measure using energy management system trends as well as a detailed utility bill analysis.

Outcome:

- Exceeded electrical saving projections by 7%.
- Annula cost avoidance exceeded projections by 11%.

Analysis:

- Overall, the Energy Conservation Measures are being operated properly, and the savings is appearing on the utility bills. The savings guarantee is being met because the control systems operate as intended.
- Ongoing communication with Quantum regarding any planned changes to the systems.

For more information: email GAEnergyTeam@ga.wa.gov
Visit our web site at <http://www.ga.wa.gov/EAS/epc/espc.htm>